PROCEEDINGS OF THE NEW YORK ENTOMO-LOGICAL SOCIETY

MEETING OF DECEMBER 1, 1925

A regular meeting of the New York Entomological Society was held at 8 P. M. on December 1, 1925, in the American Museum of Natural History, President Frank E. Lutz in the chair, with nineteen members and twelve visitors present.

A letter from Dr. Tower announcing the annual dinner of the New York Academy of Sciences was read.

A letter from Mr. J. W. Decker, Callahan, Fla., inviting his fellow members to visit him, was read.

Mr. Davis announced the death on November 27 of Lewis B. Woodruff, a life member and former member of the Society. He spoke of his excellent work as a naturalist and of his amiable personality and expressed the regret, shared by all present, at his death at 57 years of age. He stated that he had attended the funeral at Litchfield, Conn.

Dr. Lutz added his tribute, speaking especially of the labors of Mr. Woodruff in the Virgin Islands.

Dr. Leale also spoke in appreciation of his fine qualities which he said were remarkable also in other members of his family.

The secretary was instructed to write his cousin Judge James Parsons Woodruff, expressing the Society's regret.

Dr. Lutz introduced Dr. Adopho Lutz, of Rio de Janeiro, who briefly expressed his pleasure at being able to visit the American Museum and upon the prosperity of the New York Entomological Society.

Mr. Hartzell, under the title "The Relation of Entomology to the Study of Plant Diseases at the Boyce Thompson Institute for Plant Research," described the Institute founded by Col. Thompson, its endowment, equipment and staff of thirty-three investigators, using lantern slides to illustrate the splendid greenhouses and other appliances. He stressed the cooperation between pathologists and entomologists aimed for in the Board of Scientific Advisors and described some of the work initiated in studying mosaic diseases. Cicadula sex-notata was especially studied as the carrier of aster yellows.

Miss Irene D. Dobroschky spoke of the particular work assigned to her by Dr. Kunkel, in charge of pathological division, including 200 plants subject to mosaic disease and the insects, principally Coleoptera and Hemiptera, regarded as carriers of the disease. She advanced the idea that, while the carrying might be purely mechanical in the case of biting insects, there was a possibility of its being also biological in the case of sucking insects.

Dr. Lutz complimented Miss Dobroschky as the first woman to present such a study before the Society and expressed his admiration of the facilities provided at the Boyce Thompson Institute.

Mr. Bird spoke of "The Gynecological Travesty with the Dipteron Pseudolfersia maculata" illustrating his remarks with specimens of the fly. After the fly was killed a puparium was found in the cyanide bottle or a full grown larva which immediately changed to a pupa.

Dr. Sturtevant and Mr. Davis discussed the subject of living maggots being deposited by Diptera and Dr. Lutz added some of his experiences.

Mr. Davis exhibited *Vanessa milberti* and the variety *subpallida* and gave a number of data indicating its appearance late in the season and its being less rare this year than usual.

Dr. Lutz, Mr. Watson and Mr. Goldfisher added data indicating its greater abundance northward and especially this year. Mr. Goldfisher had a record October 16 at Columbia University.

Society adjourned.

MEETING OF DECEMBER 15, 1925

A regular meeting of the New York Entomological Society was held at 8 P. M. on December 15, 1925, in the American Museum of Natural History, President Frank E. Lutz in the chair, with twenty members and five visitors present.

F. R. Swift, 205 Brookside Ave., Mt. Vernon, N. Y., and H. L. Taylor, 408 Clifton Ave., Newark, N. J., were elected members of the Society.

The president appointed as a nominating committee Messrs. Sherman, Weiss and Schwarz.

A letter from Judge James P. Woodruff was read and Mr. Davis spoke also in reference to the death of Lewis B. Woodruff.

Mr. Angell stated that Mr. Howard Notman had purchased the collection of the late Gustav Beyer.

Mr. Davis exhibited a collection of cicadas which he had identified for the U. S. National Museum, including specimens collected fifty years ago. He said that 134 species and subspecies were now known from America north of Mexico, grouped into 18 genera. He gave the characters of each group and interesting details of many species. It is remarkable that the life period is still unknown for most. He showed also some western species collected by Messrs. Engelhardt and Chamberlin; and Chinese and Japanese ones received from Mr. Johnson.

Mr. Johnson said that collecting cicadas and making individual cages for them was a profession in China where they were esteemed as songsters. Bamboo poles, forty feet long, provided with a flannel cloth smeared with a very sticky preparation, were brought near the cicada perched aloft. A sudden motion of the pole throws the cloth around the cicada. The wings are usually torn and damaged.

Mr. Swift spoke of the development of the bot fly as observed in an individual intentionally raised in the calf of his own leg. Thirteen to

fifteen eggs were laid on grass blades or leaves, sticky and destined to be carried to some warm-blooded animal by mosquitoes or flies. On August 25 he put a maggot hatched from such egg near an unhealed wound. The maggot entered the wound, a hard cyst formed and three days later itching began, followed September 2 by a discharge. By September 10 the maggot began to feed in the muscle, with a burning sensation. For the next two weeks his general health was affected, especially in lack of energy and profuse perspiration. The discharge from the air vent in the cyst which had been a thin yellow serum became a thick almost black blood, with pus. On September 29 the magget moved up to the surface, the cyst puffed out with intense itching. In October the leg was swollen and inflamed at times when there were discharges of hot liquid which burned the flesh and stained through heavy khaki trousers. October 23 the magget rolled out onto the floor 2 cm long, buried in moist earth 8 cm deep, and became a fly November 25. The hole in Mr. Swift's leg healed in three weeks and the itching and aching became a memory. The experiment though painful was a success, for as he expressed it "I was determined I'd get me one."

Mr. Swift added that the usual treatment with a knife to remove the bot fly was unnecessary for they could be killed with chloroform and rolled out without enlarging the wound.

Mr. Ragot recorded *Vanessa milberti*, a worn specimen, seen in Long Island City, on December 9.

Dr. Lutz exhibited Imms' General Text Book of Entomology.

Mr. Frankenstein, present as a visitor, showed microscopic mounts of Stylops, parasitic on Hymenoptera.

Society adjourned.

MEETING OF JANUARY 5, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M. on January 5, 1926, in the American Museum of Natural History, President Frank E. Lutz in the chair, with twenty-five members and three visitors present.

On motion of Mr. Olsen, a vote of thanks was tendered to Mr. Davis for his long and efficient service as treasurer.

The nominating committee submitted its report and there being no other nominations the secretary cast one affirmative ballot, thereby electing the following:

OFFICERS FOR THE YEAR 1926

President, Frank E. Lutz, American Museum of Natural History, New York.

Vice-President, Henry Bird, Rye, N. Y.

Secretary, Chas. W. Leng, Public Museum, Staten Island, N. Y.

Treasurer, Wm. T. Davis, 146 Stuyvesant Place, Staten Island, N. Y.

Librarian, Frank E. Watson, American Museum of Natural History, New York.

Curator, A. J. Mutchler, American Museum of Natural History, New York.

EXECUTIVE COMMITTEE

H. G. Barber Harry B. Weiss

Herbert F. Schwarz

PUBLICATION COMMITTEE

Harry B. Weiss

F. E. Lutz C. E. Olsen John D. Sherman, Jr.

Delegate to the New York Academy of Sciences Wm. T. Davis

The President appointed as Auditing Committee E. L. Bell, Wm. F. Lawler, Jr., Dr. E. R. P. Janvrin; as Field Committee, A. S. Nicolay, E. Shoemaker, and as Program Committee, A. J. Mutchler, H. B. Weiss, Dr. A. H. Sturtevant.

The President announced that under the will of the late Lewis B. Woodruff the Society would receive a bequest of \$10,000; and that Hawkins, Delafield and Longfellow would attend to the interests of the Society in the probate proceedings, sending in due course such papers as it may be necessary to execute. He read the paragraphs of the will affecting the Society, as follows:

"I give and bequeath to the New York Entomological Society (Inc.) the sum of ten thousand dollars (\$10,000) to be added to its "Permanent Fund." While intending in no way to impose upon said Society any conditions with respect to this gift, or any binding restrictions respecting the use of the income derived therefrom, I would suggest that this legacy be invested in some conservative income producing property or securities, and that its income be devoted primarily to the publication of technically illustrated monographs of groups within the field of the Society's present authorized activities, such income to be allowed to accumulate, if necessary, to that end; and that a memorandum of this suggestion, if it meets with the Society's approval, be filed with the permanent records of its treasurer.

"I direct my executor to have my scientific library appraised at the expense of my estate, suggesting for that purpose my friend, John D. Sherman, Jr., now of 132 Primrose Avenue, Mount Vernon, N. Y., and before attempting to make other disposition of it, first to offer and dispose of the several items thereof at one half their respective appraised valuations to the members of the New York Entomological Society and the Linnaean Society of New York who may desire the same for their own use and not for resale, such offer to be made through

the respective secretaries of such Societies."

On motion by Mr. Barber, as chairman of the Executive Committee, the following resolution was adopted:

Resolved, that the president, Dr. Frank E. Lutz, be and hereby is authorized to sign for the Society any and all papers required in connection with

the bequests of Lewis B. Woodruff, and to affix thereto the seal of the Society.

The librarian reported accessions.

Mr. Charles Louis Ragot, 21 Floyd St., West New Brighton, Staten Island, was elected a member.

Mr. Leng, under the title "Our Changing List of Coleoptera," compared the Crotch List of 1,873 listing 7,450 species with the MSS Supplement of 1925 bringing the total up to 21,000 names, and pointed out the causes of the increase, viz., the activity of Col. Casey, the study of obscure groups like Aleocharinæ, and of distant regions like the Mexican border, but most of all the finer discrimination leading to the description of many subgenera and subspecies. He questioned the advantage of loading the catalogue with varietal names and recalled, as equally applicable now, Schaupp's plea in 1880 "we need short, clear, synoptic tables of the known species, giving the principal characters of those species, their size, and locality."

His remarks were discussed by several members, among whom Mr. Schaeffer who said one name might with advantage be removed, *Licinus silphoides*, because years had passed since a single specimen had been found in Massachusetts.

Mr. Nicolay gave an interesting account of "Beetling in the White Mountains during July," illustrated by specimens and photographs. Sphaeroderus brevoorti, Carabus groenlandicus, Notiophilus nemoralis, aquaticus and borealis, and many other interesting species rewarded the efforts he and his companions, Messrs. Quirsfeld and Mason, had exerted. Icy winds, black flies, and mosquitoes had, however, lessened the pleasure of the trip, and the loss of all his traps by the depredations of wild animals had been a disappointment.

Mr. Davis spoke of the wasp *Bembidula quadrifasciata* Say and some of its habits. His remarks will be printed in full.

Dr. Lutz and Mr. Schaeffer discussed the best season for collecting at Brownsville, Texas, which Mr. Schaeffer considered to be June.

The interesting captures made in South Alabama by Mr. Loding and Dr. Bequaert were also discussed.

MEETING OF JANUARY 19, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., in the American Museum of Natural History, Vice-President Henry Bird in the chair, with eighteen members, and nine visitors present.

Mr. Tee Van exhibited "Insects collected at Sea by the Arcturus Expedition," consisting of species of the water strider Halobates actually living at sea, twenty or more land insects found at sea, some even 150 miles from land, and a number of insects found on the Cocos and Galapagos Islands. With lantern slides he showed the route of the Arcturus and the methods used in collecting and studying the organisms on board the vessel. He pointed out many items in the life history of Halobates not yet ade-

quately studied and several members joined in the discussion that followed especially as to the diving habits.

Mr. Ragot showed a "New Exhibition Box for Insects" which was arranged with strips of mirror, so that pins might be inserted between the strips, thus permitting a perfect reflection of the underside. The butterflies selected for exhibition also showed some of the interesting features of Mr. Ragot's summer collecting on Staten Island, viz., Basilarchia astyanax v. albofasciata, Euptoieta claudia in numbers, Eurymus eurytheme, etc. The labels on Mr. Ragot's specimens were photostat reduced reproductions of typewritten, by which process he pointed out that 1,000 labels could be procured in an hour at a cost of twenty cents.

Mr. Mutchler exhibited for Mr. Frank Johnson a box of *Ornithoptera* butterflies 3 and 9 of extraordinary size and brilliant color.

Dr. Gehring, of Bethel, Maine, present as a visitor, spoke of his association 50 years ago with E. A. Schwarz in the latter's third trip to Florida. Savannah, Fernandesia, Cedar Keys, Tampa, where they lived in a cabin on the Hillsboro River for a month, then across the state to Enterprise, and New Smyrna, were the places visited. He described Mr. Schwarz as being scant of hair but full of joy when Spalacopsis or Zuphium rewarded his efforts, and continually singing Lorelei, even when, as at New Smyrna, raw tomatoes and crackers constituted the menu. Some incidents that Dr. Gehring recalled were finding Pasimachus early in the morning in irrigation ditches, the abundance of whip scorpions locally called mule-killer because often found under the saddle cloth of dead mules, the abundance of egrets and parrakeets, and the roaring of bull alligators at night. He said that Mr. Schwarz was at that time determined to give his life to science and also spoke of his later years having been quietly marked by assisting many younger men in colleges and otherwise.

Dr. Gehring spoke also of the great skill of Charles Dury as a collector leading to the creation of the verb to duryize for the finding of supposedly rare species in numbers.

His remarks were highly appreciated, many members recalling other memories germane to his subject. Mr. Davis described the piles of wood kept in orange groves to burn against a threatened frost and the whip scorpions found beneath them, locally known as "vinegaroons." Mr. Tee Van spoke of other scorpions of British Guiana as being exaggerated in respect of deadliness. Their sting was deadening in the effect for an hour but not fatal.

MEETING OF FEBRUARY 2, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M., in the American Museum of Natural History, President Frank E. Lutz in the chair, with twenty-six members and nine visitors present.

Mr. Hall exhibited several boxes of butterflies from the Wind River Range, Wyoming, and spoke in detail of the distribution of Lepidoptera in different zones of altitudes.

In the lower zone, including the sage brush plains, characteristic species were Euphydryas gilletti, Heodes rubidus, and Cercyonis alope-nephele; in the middle zone, Erebia sophia and Brenthis frigga; in the upper zone, Erebia magdelina and Brenthis pales; while Aglais milberti was found in all zones. The character of each zone was shown by photographs, and it was pointed out that at 1,000 feet snow and ice replaced butterflies except for straggling visitors.

In the discussion which followed it was brought out that the total expense of a three weeks' trip from New York to the Wind River Range, southeast of Yellowstone National Park, was about \$330.

Prof. A. F. Huettner spoke with illustration by lantern slides, on "The Maturation and Early Development of the Insect Egg." He pointed out first the latent danger to agriculture in the enormous number of eggs produced by the female, and then proceeded to show the male parts by which the fertilizing sperm is produced and the female parts producing and conveying the egg. The egg itself, consisting mainly of food material, was then shown with its micropyle through which the sperm, propelled by its whip-like thread, gains access. The development of the egg after such fertilization was then shown including the results of more than one sperm becoming involved. It was suggested that a consequence of two sperms uniting with a single egg might be a gynandromorph; and several such in Drosophila closed the series of illustrations.

Dr. Lutz, Dr. Sturtevant and Mr. Watson joined in the discussion of the subject, particularly in reference to the beautiful sculpture of the eggs to which Prof. Huettner had alluded.

At the request of Mr. Watson, Carl Heinrich's editorial in the current issue of the Proceedings of the Entomological Society of Washington was read.

Mr. Leng called attention to an error in the Zoological Record for 1922, by which Ababa crinita Csy., is erroneously credited to Borchmann.

MEETING OF FEBRUARY 16, 1926

A regular meeting of the New York Entomological Society was held at 8 P. M. on February 16, 1926, in the American Museum of Natural History, President Dr. Frank E. Lutz in the chair, with twenty-one members and seven visitors present.

Mr. Stephen Thomas, 240 West 71st St., was elected a member.

Mr. Davis reported progress on New York State List of Insects, reading a letter from Prof. Crosby.

Mr. Bell gave an account of his experiences in collecting butterflies, and other insects, at and in the vicinity of Mobile, Alabama, during the last of August and the first of September, 1925; he exhibited a few of the more interesting *Hesperiidae*, collected by him in that locality.

Mr. Engelhardt gave an account of "Reconnoitering the Deserts of Southern California and Arizona," with Mr. W. J. Chamberlin, of Corvallis,

Oregon, in an automobile which was like a traveling hotel. At Santa Barbara they visited Mr. Fred Winters, at Yuma they met with two students of Prof. Harned's, at Phoenix they met former companions of Mr. Glick, and there and at Tucson found entomological stations. Camping in the Santa Rita mountains a trap lantern yielded at least 1,000 moths and throughout the trip, while there was often an absence of life during sunlight hours, insects were found at night and wherever water occurred. Two interesting boxes of insects were shown, and Mr. Engelhardt had time only to speak of the cicadas, grasshoppers, Scaphinotus catalinae and Monilenna of which Mr. Chamberlin collected about a quart on cactus after rain, when trouble with the electric light ended the meeting.

ERRATA

Vol. XXXIV, page 295, in the Key to Subfamilies, for "3(5)" read "3(4)."

Vol. XXXIV, page 297. Line 5 from bottom, for "1(38)" read "1(36)."

Vol. XXXIV, page 298. Line 7 from bottom, for "16(37)" read "16(35)."

Vol. XXXIV, page 298. Line 5 from bottom, for "17(34)" read "17(32)."